DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-029144
Date Inspected: 05-Feb-2013

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: USA Hoist

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: USA Hoist, Crest Hill, IL

CWI Name:	Robert Zimny			**CWI Present:**	☐ Yes	☑ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☐ Yes	☐ No	☑ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS Tower Elevator

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at USA Hoist, Crest Hill, IL as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At USA Hoist fabrication shop, Mr. Matt Wasiqi was noted continuing to cut formed channel and hot rolled ASTM A36 bar for the elevator cab frame. Mr. Wasaqi was noted using the Marvel Vertical Band Saw in cutting the formed channels and the rolled bars to the required length and then put the notches where they are required. The following items with mark part number of pieces and corresponding descriptions were cut and put the notches during the shift;

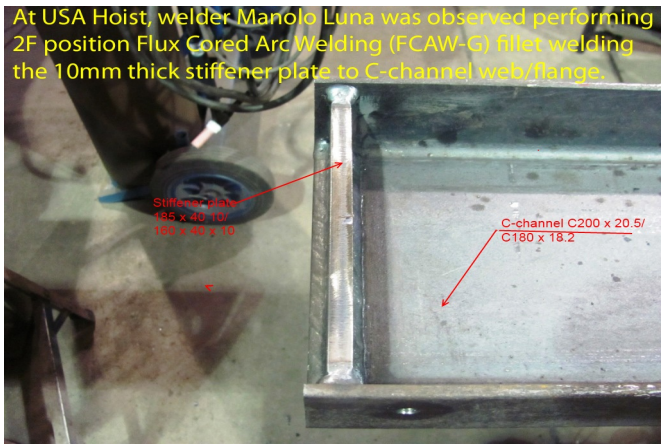
1. 916042 4 pieces formed ch. 3/16” x 1 ¼” x 2 1/4” x 26” right side B channel
2. 916043 4 pieces formed ch. 3/16” x 1 ¼” x 2 1/4” x 26” left side B channel
3. 916045 2 pieces hot rolled bar 3/16” x 2 1/2” x 70 1/4” panel mating plate
4. 916046 4 pieces hot rolled bar 3/16” x 2 1/2” x 38 5/8” panel mating plate
5. 916047 4 pieces hot rolled bar 3/16” x 2 1/2” x 5 7/8” panel mating plate

At the same fabrication shop, this QA randomly observed USA Hoist certified welder Manolo Luna fillet welding stiffener plate to C-channel intended for tower elevator door enclosure stops 1, 4 and 5. The welder was noted welding at 2F (horizontal) position utilizing gas shielded Flux Cored Arc Welding (FCAW-G). The fillet welding connection is between the C-channels C200 x 20.5/C180 x 18.2 inside web/flange and 10mm thick stiffener plate. The 6mm fillet was welded on six (6) sides of the stiffener to the channel per USA Hoist shop drawing 914911.

The welder was noted using gas shielded FCAW-G with 1.1mm E71T-1C Familiarc DW-50 wire electrode implementing USA Hoist Welding Procedure Specification FCAW3210. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 35 CFH. During the shift, the welding parameters were measured 26 volts and 190 amperes which deemed in compliance to the project requirements.

After the welding completion of the two stiffener plates welded on C200 x 20.5 on one side and C180 x 18.2 on the other side, the welder performed another fillet welding on four (4) 3/16" thick brackets to the C200 x 20.5 web plate. The four 3/16" thick bracket plates are intended for holding the tower elevator door lock in place and they are being welded per USA Hoist shop drawing number 914910. The welder was noted 1/8" fillet welding all around the bracket to the web plate using the same process and implementing the same welding procedure mentioned above.

This QA received mill certification from Tim Moran of USA Hoist. After a review of the material and the supporting documentations, the QA Inspector signed the mill certification reports for the following material: Two pieces hot rolled 0.187" x 2.5" x 20 feet ASTM A36 and one piece hot rolled 0.187" x 2.0" x 20 feet ASTM A36 from Hynes Industries with heat #4142529 for both flat bars. After reviewing this provided documentations, this QA performed random visual identification of this material listed above to ensure it was acceptable for use. This QA observed the heat number on the MTR appeared to match the heat number tagged to the material. This QA observed the documentation and visual verification of the material appeared to be in general compliance with the approved project drawings listed material for the Cab Frame. This QA signed on the MTR "OK-TO-CUT" and assigned a Caltrans lot number B231-003-13 for tracking purposes. Material was properly staged inside the shop facility and heat number was transferred to the individual pieces using a marker.



Summary of Conversations:

Today at USA Hoist fabrication shop, this QA met with fellow QA James Kent Smith who came and perform a shop visit for the fabrication of tower elevator. This QA showed Mr. Smith all the pertinent documents associated with the project. Mr. Smith was also given a tour to the shop and noted how the project was progressing. Mr. Smith was also introduced to some USA Hoist personnel during the tour. After the tour, this QA and fellow QA James Kent Smith attended the Alta Vista Solutions (AVS) company sponsored webinar at 10:30 AM.

WELDING INSPECTION REPORT

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Foerder,Mike	QA Reviewer